5
630.2
A7M
1972

STATE DOCUMENTS

NOV 1 1971

MONTANA'S AGRICULTURAL OUTLOOK FOR THE SEVENTIES

Montana State Library
3 0864 1006 4737 2

Montana's Agricultural Outlook For The Seventies

Compiled by the

MONTANA
DEPARTMENT OF
AGRICULTURE

GEORGE LACKMAN, Commissioner
Capitol Annex
Helena, Montana 59601

July, 1970

Foreword

The achievements reflected in this brochure are intended to promote the future of agriculture in Montana. We have thoroughly probed where we have been and where we are and we have boldly looked at the opportunities that lie ahead for those involved in agriculture.

It is my sincere hope that the material within these covers will enlighten the thoughts of many who are still in the dark about the aesthetic needs of those producing the food and fiber so vital to our welfare.

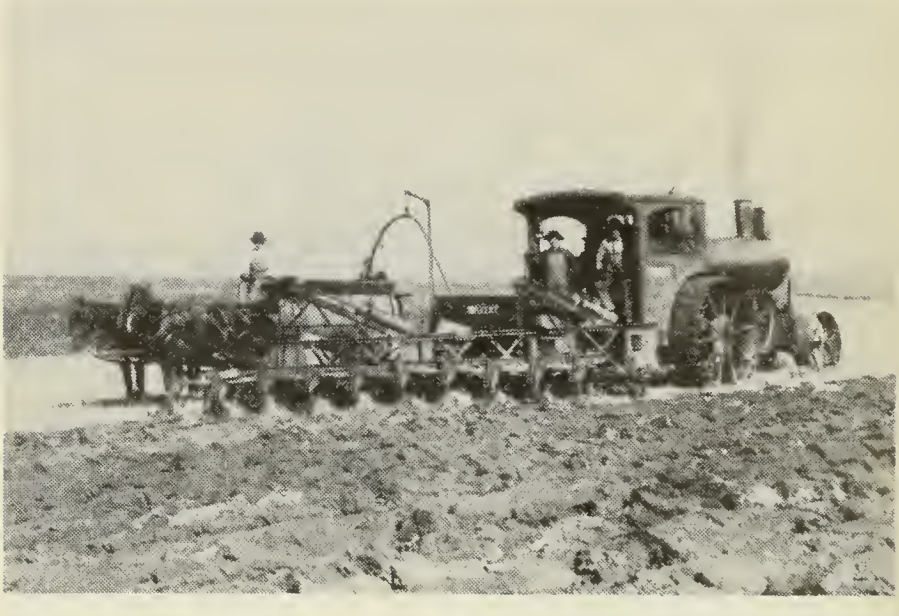
Agriculture contributes immeasurably to the economic and social strength of Montana. It is, and will be, our number one industry for years to come. To pursue and promote its efflorescence, we must encourage and counsel with persons, agencies, organizations and industries in implementing a sound and wholesome program.

In the seventies, our efforts must be co-ordinated toward maximum farm and marketing procedures, developing new techniques for selling Montana farm products, and establishing new markets for such products.

GEORGE LACKMAN,
Commissioner of Agriculture.

THE CHANGING TIMES

Montana Historical Society Photo



Montana Historical Society Photo

CONTENTS

Management 4

Education 4

Capital and Credit 5

Labor 5

Taxes 5

Farm Production 6

Animal Industry 7

Crops 8

Marketing 10

Transportation 11

Resource Use 11

Soil 12

Water 12

Pollution 13

Pesticides 13

Recreation and Culture 14

Management

Increasing costs, the ever present price-cost squeeze, larger operations, and technological change will place greater emphasis on sound business management throughout agriculture in the seventies. Managers will need to evaluate continually the best combination of enterprises and to plan, organize, and control their businesses in order to maximize returns to the limited resources available. Knowing what combination of crops and livestock to produce could be more important than knowing how to produce the individual commodities.

In order to meet this challenge, those engaged in all sectors of agricultural production will require more complete and accurate business records. Accurate data on livestock numbers, crop acreage production, future prices, producers' intentions, supply and demand (both foreign and domestic), and government programs and policies will be vital to all concerned. To be useful, data must be accurate and current and it must be disseminated quickly.

The Montana Department of Agriculture has reorganized its program to provide better and more timely information on commodity supply and demand conditions, current and future price expectations and production technology.

State Soil Conservation Committee Photo

Education

While total farm employment will continue to decline in Montana, an explosive technology will place new demands on those who have the knowledge and skill to cope with the highly mechanized and technical agricultural complex. Employment

opportunities in the supplying and marketing sectors of agriculture will reward those who possess a unique farm background, and who have the formal education skills required.

Many young Montanans growing up in an agricultural environment have aptitudes for developing exacting skills requiring technical and scientific knowledge. Others who may not have the opportunity to attend a four-year college can develop highly technical and practical skills through specialized training.

Young farmers and others employed in agriculture have access to educational and training resourses at various local and state institutions. They need to be motivated and supported in their efforts to achieve education and training if Montana's best interests are to be served.

Capital and Credit

The need for money and credit will grow at a rate greater than the growth in farm size. The best way to increase profit is to develop efficient management.

Steps are being taken to assemble research information and begin a program of continuing research in agricultural credit in Montana. Increased attention must be given these developments to reverse the flow of people leaving rural Montana.

Labor

While the quantity of labor required is expected to decrease, the quality requirements will increase as agricultural production becomes more complex. Improved techniques for recruiting and moving labor where it is needed, providing adequate housing and improving wages will be more important to tomorrow's farmers.

State and Federal agencies aid in developing labor-management relations and are available to consult with the farmer and rancher.

Taxes

Agricultural land within Montana is classified according to its use, that is: non-irrigated, grazing, irrigated, wild hay and continuous cropped land.

The long term productivity of each class is determined and the land is graded according to its yield per acre. The assessment of agricultural land for tax purposes is in relation to the value of its product.

To accommodate the expanding population, effective planning will be necessary to provide a balanced use of available land suitable for cultivation.

Tax incentives are needed for preserving open space for agriculture and recreation near urban areas.

Farm Production

Cash receipts from agricultural marketing and government programs reached $610 million in 1969. Montana farms and ranches provided employment for some 60 thousand persons and related enterprises furnished employment for many more.

Montana State University Photo

At the start of a new decade, it seems appropriate to ask certain questions.

In general, what can our agricultural producers expect in the seventies?

More specifically, will our agricultural production improve its competitive advantage, maintain its relative national importance, and continue to be a healthy, viable sector of Montana's state economy?

Agricultural producers will benefit from a continued fast growing demand for food. It is esti-

mated that by the mid-seventies there will be 30 million additional Americans to feed.

The world population will increase by about 700 million. U. S. farms will be the difference between life and starvation for many in foreign lands. Foreign food needs will have a growing influence on what farmers plant and the price they will receive for their production.

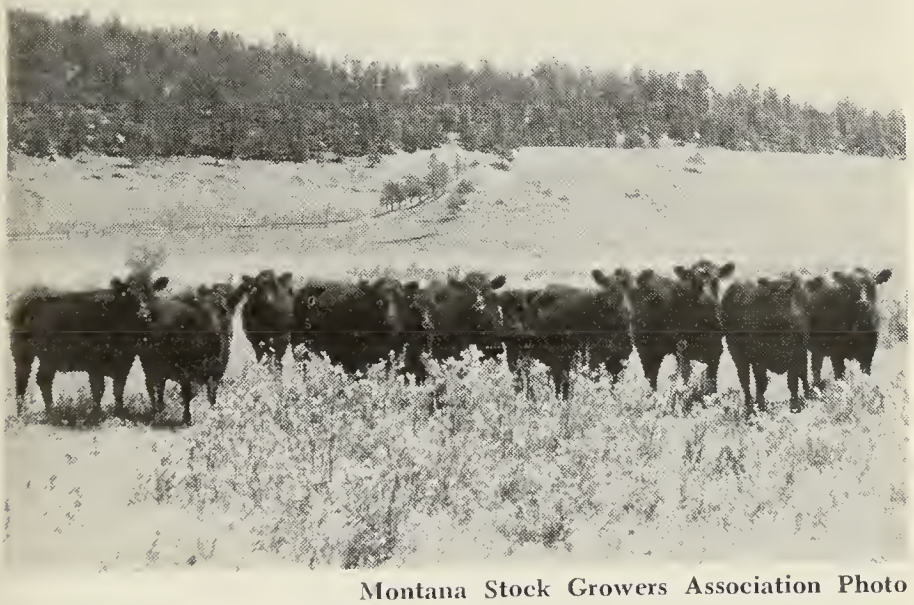
Although fewer in number, farms in the seventies will be bigger and more specialized with higher incomes. In addition, there will be other new opportunities in agri-business for trained persons in the more complex management structure.

Animal Industry

Montana stockmen had 3,104,000 cattle and calves, including 47,000 head of dairy stock, on hand January 1, 1970. This cattle inventory had a value of $587,730,000. The 1,146,000 sheep and lambs on Montana ranches and farms had a value of $33,234,000.

Hogs and pigs were estimated at 161,000 head at the beginning of 1970. Total value of the swine inventory was $5,892,000.

In numbers of livestock among all the states Montana ranks 13th in all cattle and calves, 7th in beef cows, 4th in stock sheep and 30th in hogs.



Montana Stock Growers Association Photo

Continued population growth on the West Coast and increases per capita consumption of red meats provides an opportunity for the expansion of Montana cattle feeding. Montana feed lots marketed 177,000 head of fed animals in 1969. With

our available feed supply, numbers of calves produced and potential market, the fed animal marketings may double in the next ten years.

More beef of all classes will be sold direct rather than through terminals. Auctions will hold their own. In the next ten years feeder animals will be sold on rate of gain. Regular twinning through hormone use and heat control and artificial insemination of beef cows will grow in popularity.

Montana's pork producers will see such things as hog confinement feeding with completely automatic systems, controlled breeding with the use of artificial insemination and heat synchronization.

Montana Wool Growers Assn. Photo

Sheep ranchers also will see substantial changes in such management practices as ewes producing two crops of lambs a year with the aid of hormones and lean meat yields continually increasing upwards—three bites in a lamb chop instead of one. At the end of the seventies bands of sheep will be raised under controlled grazing conditions rather than on the open range.

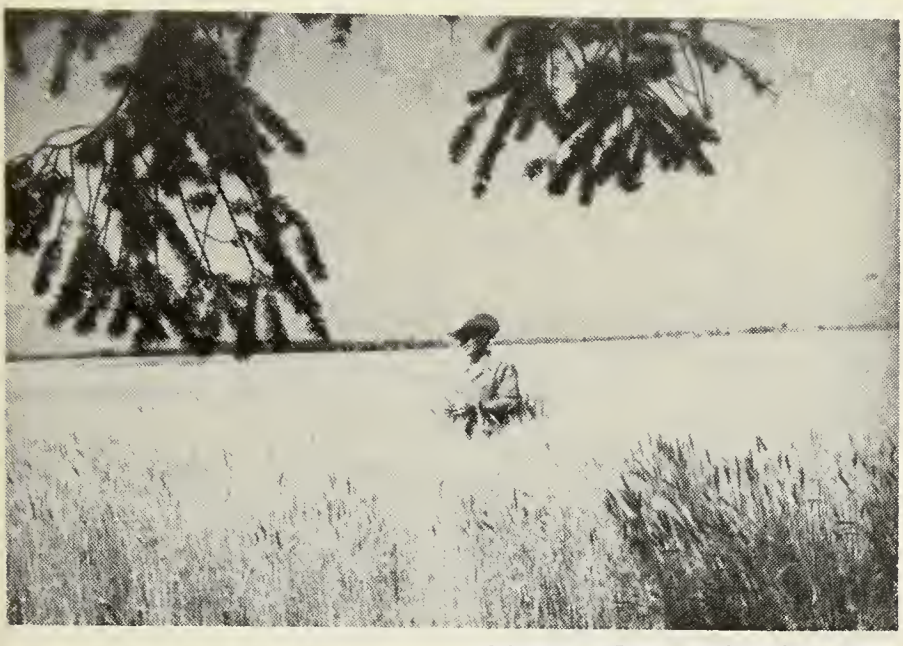
Present trends in the dairy industry will continue through the seventies with fewer operations and increased herd size and greater production per cow.

The soaring sixties will become the sizzling seventies for farmers and ranchers in Montana.

Crops

Montana-grown crops were valued at $298 million in 1969. That is a $9 million increase above

the 1968 value, but is virtually the same as the 1967 crop value. Montana's wheat production in 1969 of 96,794,000 bushels was the third largest



Montana State University Photo

in the nation. The total wheat production consists of 60,086,000 bushels of winter wheat, 29,808,000 spring wheat and 6,900,000 durum wheat.

Montana's feed grain crop for 1969 was outstanding. Barley production reached a record-setting 67,914,000 bushels, third highest in the nation. The oat crop output of 14,550,000 bushels ranked fifteenth nationally. Our flax seed production was sixth highest at 144,000 bushels. Alfalfa seed production of 1,890,000 pounds ranked eleventh.

Frost damaged some of the irrigated crops but warming temperatures and adequate water provided for recovery with good yields. Sugar beet production set a record at 1,215,000 tons, ranking eighth nationally. In addition, Montana produced 1,388,000 CWT. of potatoes and 135,000 bags of dry beans.

Following the long, cold 1968-1969 winter hay stocks were low, but supplies were replenished by a record 1969 crop of 3,882,000 tons.

In the seventies Montana crop yields will increase. Growers will plant higher yielding hybrids. With greater fertilizer use, that may provide yields of hard wheat up to 100 bushels an acre on dryland.

New cultural practices will include seed marketed in chemical coats, use of low volume sprays and soil incorporating materials. Other new ideas

will give safer and more dependable crop production.

Insect control techniques will utilize sterile males, predators, insect diseases, sex attractments and other methods of insect suppression.

Marketing

United States agricultural policy will continue to specify the rules which will determine which agricultural resources will be used and which will not. Policies that rely on past history, as our present policies do, treat Montana relatively well. Policies that rely more heavily on the concept of economic efficiency may mean serious problems for most of Montana, unless we can become more efficient. If we become more efficient we will be able to compete effectively with other agriculture regions to produce a significant share of the expanding national and international needs for agricultural products.

Marketing will play a key role in the 1970's to improve Montana's chances for growth. Ag-producers have and will continue to master new production techniques. The crux of the problem is what to do with production or how best to master market distribution. In the next ten years, there will be a real need for producers, processors, and retailers to more closely coordinate their activities toward a more total concept of product marketing.

The State Department of Agriculture, producer organizations and other state agencies will become increasingly involved in marketing functions in order to put Montana products in a more competitive position within the new market places both at home and abroad.

As we move into the seventies the Department of Agriculture will seek better ways to effectively market Montana's products through new programs coupled with a practical sense of reality.

Market information is more important than ever because commodity movement is faster and more closely tied to the national and international markets than ever before. The Department of Agriculture is working for the development of a Montana Livestock News Service and a Montana Grain Market News Service.

Active participation in marketing policy formulation by representatives of Montana agriculture will be of increasing importance in the seventies. The Department of Agriculture will continue to take an active role in the compiling of objective agricultural statistics and research from which to establish policy positions best expressing Montana's needs.

Transportation

Because there is very little competition among Montana's transportation facilities our freight rates for grain are among the highest in the country. That together with our geographic disadvantage creates a marketing problem that must receive substantial attention in the next decade.

Departmental efforts will continue to obtain equitable and competitive rail freight rates for Montana. Rate adjustments either generated by the I.C.C. or increased competition by truck or barge would increase Montana's competitive marketing position significantly.

Research will be undertaken in an effort to identify marketing adjustments that can be made to enable the rails to utilize high efficiency, low cost technology such as unit train, rent-a-train and hopper cars.

Resource Use

Time is running out if we are to prevent our natural environment from either being destroyed or greatly reduced in value for future generations. Eventually large acreages of land will be required for urbanization, industrialization and other non-agricultural uses. Reduced tillage and other new production techniques will enable agriculture to utilize certain land for crops not previously considered suitable for such purposes. However, there are limitations to such adjustments. Land most suitable for agricultural production often is desired for urban and industrial development. Land speculations often promote "leapfrog" development which results in higher cost for schools, water, sewage, streets and other public services.

The challenge concerns the orderly development of our land resources to meet the expanding

space, food and recreational needs for the people of Montana. Federal, State and local agencies are involved with programing for future needs in agriculture, residential, commercial, industrial and recreational developments.

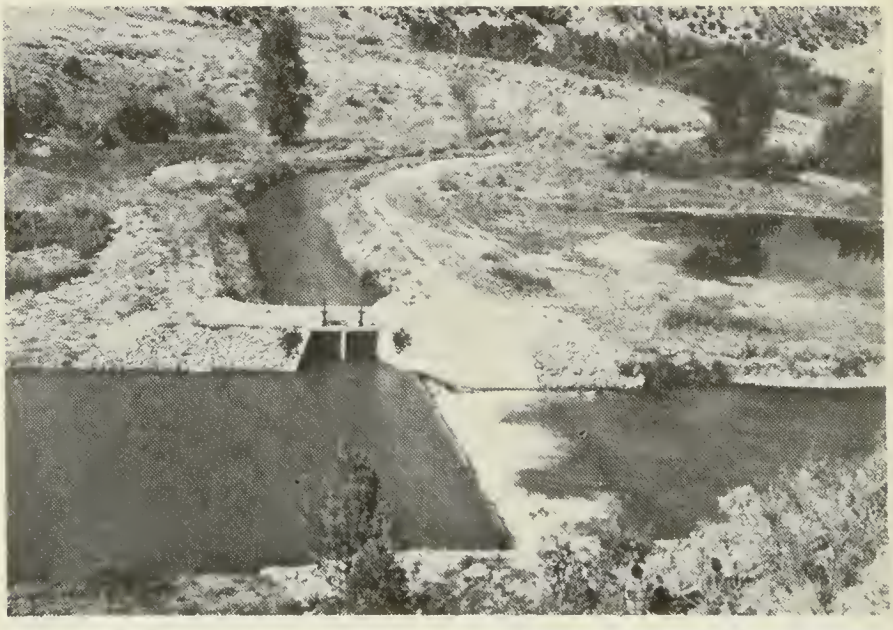
Soil

A detailed knowledge of soil capability and adaptability is essential for profitable production management. Such knowledge also is essential in determining the best use of land for non-farm purposes. In view of high demand and rapidly increasing prices, it is essential that soil survey work continues to receive high priority. Paralleling survey and mapping needs is the need for more information on soil properties and behavior as new technology and economic pressures bring about more extensive use of our soil resources.

Through easily understood reports, the U.S.D.A. Soil Conservation Service, The State Soil Conservation Committee and the Montana Department of Agriculture are striving to disseminate information on erosion and other soil properties to planners, property developers and people in the industry of agriculture.

Water

Precipitation, stream flow and water table information indicate that Montana will have ample



Water Resources Board Photo

water until the year 2020, if appropriate action is taken to conserve and store it and to reduce contamination within acceptable limits.

Providing an abundant supply of good quality water is one of the most important challenges facing Montana today. All segments of our society, rural and urban, agriculture and industry, have a stake in assuring that sufficient quantities are available.

Montana's Water Resources Board assumes primary responsibilities for protecting, developing and coordinating state and local plans to assure water storage facilities.

Pollution

Air and water pollution are becoming critical problems for industry and agriculture. No longer can we take for granted clean air or a plentiful supply of good water. All Montanans have a vested interest in maintaining a high quality environment; our economic and physical health depends on it. The alternatives are economic stagnation or an increasingly uninhabitable environment.

Realizing the seriousness of the situation, the Montana Department of Agriculture is exploring the practical implications for the agricultural sector in resolving the pollution problem.

Pesticides

Pesticides are of major importance to mankind for the production of food and fiber and for the control of disease. However, their secondary effects and related hazards have caused increasing concern for the health of man and the life systems in our global environment.

Unfortunately in Montana the pesticide issue has fomented such intense controversy that in some instances, it has extended beyond the realm of sound judgment and reason.

Knowledgeable individuals, scientists, medical men, government agencies, universities and the pesticide industry itself have expressed their views. We must listen to these people and trust in their judgment.

Thousands of disease and pest organisms challenge man's survival including his food supply every day of his life. We have no choice but to counter these forms, hopefully without undue haz-

ard to other living forms, including ourselves. A compromise between what we need (food) and what we want (no pesticide pollution) is in order and is now in the process of being made.

The following areas need to be explored and solidified:

1. Establish a benefit-risk equation on each pesticide use by following only realistic guidelines.
2. Apply pesticides only for essential health, agricultural, or urban uses when the need is based on sound principles. Total pest management by well-trained personnel is requisite to achieve this goal.
3. See that all persons handling pesticides share equal or proportionate responsibility.
4. Determine that all pesticides and pesticide containers will be handled and disposed of safely. Instructions do need to be firmly established in this highly important area.

Each of us in agriculture feels a heavy responsibility towards achieving common-sense objectives.

Recreation and Culture

Montana is the nation's fourth largest state, averaging 550 miles in length and 275 miles in width. The Continental Divide runs north and south

State Advertising Dept. Photo

through the western section. The highest point is Granite Peak, 12,799 feet; the lowest is 1,820 feet on the Kootenai River at the Idaho line. Climate varies with topography and altitude. Average rain-

fall is 15″, varying from a minimum of 9.69″ to over 100″. Average daytime temperatures vary from 28 degrees in January to 84.5 degrees in July.

Governor Forrest H. Anderson has noted, "Montana is a land of great variety and presents a panorama of the best of nature's design."

Montana offers some of the best trout fishing in the nation; the Missouri, Yellowstone, Madison, Kootenai, and Clark Fork Rivers with their many tributaries and lakes, offer the angler a wide choice in species of fish as well as types of fishing.

In addition, Montana's vast reaches of native wilderness provide outdoorsmen and nature lovers with a look at pristine country as it was many decades ago. Herds of antelope, deer, elk, bighorn sheep, plus moose, mountain goats and grizzly bear continue to thrive in Montana's 11 national forests and 8 wilderness areas, offering the sportsman excellent hunting.

For the bird hunter, a variety of upland game is available. Species such as the sharp-tailed grouse, sage grouse, blue grouse, Franklin's grouse, ruffed grouse, ring-necked pheasant, Hungarian partridge, chukar partridge, and wild turkey provide hunters with a variety of enjoyment.

Improving the quality of life in Montana includes providing ample opportunities for recreation. Augmentation of wildlife areas and improved boating, fishing and camping facilities will help promote tourism and provide additional income to rural Montana.

A Tribute to Grass

Next in importance to the divine profusion of water, light and air, those three physical facts which render existence possible, may be reckoned the universal benificence of grass. Lying in the sunshine among the buttercups and dandelions of May, scarcely higher in intelligence than those minute tenents of that mimic wilderness, our earliest recollections are of grass; and when the fitful fever is ended, and the foolish wrangle of the market and the forum is closed, grass heals over the scar which our decent into the bosom of the earth has made, and the carpet of the infant becomes the blanket of the dead.

Grass is the forgiveness of nature — her constant benediction. Fields trampled with battle, saturated with blood, torn with ruts of cannon, grow green again with grass, and carnage is forgotten.

Streets abandoned by traffic become grass-grown, like rural lanes, and are obliterated. Forests decay, harvests perish, flowers vanish, but grass is immortal. Beleagued by the sullen hosts of winter it withdraws into the impregnable fortress of its subterranean vitality and emerges upon solicitions of spring.

Sown by the winds, by wandering birds, propagated by subtile horticulture of the elements which are its ministers and servants, it softens the rude outlines of the world. It evades the solitude of the deserts, climbs the inaccessible slopes and pinnacles of mountains, and modifies the history, character and destiny of nations.

Unobtrusive and patient, it has immortal vigor and aggression. Banished from the thoroughfare and fields, it bides its time to return and when vigilance is relaxed or the dynasty has perished it silently resumes the throne from which it has been expelled but which it never abdicates. It bears no blazonry of bloom to charm the senses with fragrance or splendor, but its homely hue is more enchanting than the lily or the rose. It yields no fruit in earth or air, yet should its harvest fail for a single year, famine would depopulate the world.— Anon.

Montana's
Number One
Industry
AGRICULTURE
1